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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,222	12/21/2001	Jin Hee Jung	8733.445.00	3350

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EXAMINER

FINEMAN, LEE A

ART UNIT PAPER NUMBER

2872

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/024,222

Applicant(s)

JUNG, JIN HEE

Examiner

Lee Fineman

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other:

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The disclosure is objected to because of the following informalities: On page 11, line 4, "Fig. 12" should be --Fig. 11D--.

Appropriate correction is required.

Claim Objections

3. Claims 11-22 are objected to because of the following informalities:

✓ In claim 11, line 4, "(transparent substrate the)" does not make grammatical sense and does not add to the claim limitations and therefore should be removed.

✓ In claim 17, line 3, when using an acronym at the first occurrence (i.e. WGM) the meaning should be expressly stated.

✓ In claim 19, line 2, the single character "(" should be removed.

The dependent claims inherit the deficiencies of the claims from which they depend.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 8-12, 17-18, 23-24, 27, and 29-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Franklin et al., European. Patent Application No. 0 477 882 A2.

Regarding claims 1, 23 and 27, Franklin et al. discloses a polarizer stereoscopic display apparatus (fig. 1) comprising a liquid crystal display panel (12) for producing modulated light in accordance with signal data having a left-eye and right-eye image information (14, 16); a polarizer (column 2, lines 8-10) for passing a portion of the modulated light from the liquid crystal display, wherein a portion of modulated light has a predetermined polarization; and a patterned retarder layer (22) including a plurality of first area cells (26) for separating light polarization passed through the polarizer into a left-eye picture and a plurality of second area cells (24) for separating light polarization passed through the polarizer into a right-eye picture, wherein the plurality of first area cells and the plurality of second area cells are patterned in accordance with the predetermined pattern of said left-eye and right eye-modulated light (column 2, lines 7-35) and wherein the first and second cell areas are in alternating lines.

Regarding claims 2-3, 10-12, 17-18, 24, and 29-30, Franklin et al. further discloses wherein the retarder layer is formed on a transparent substrate (fig. 3, 62) that is made of waveguide material and from a solvent-proof polymer (polyimide) and does not affect polarization changes of the light between the polarizer and the retarder; wherein the transparent

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substrate is adhered to the polarizer (fig. 7); and wherein said retarder layer is covered with a protecting polymer (figs 7 or 8). The method of utilizing the structure of the claim is inherent therein.

Regarding claims 8 and 9, Franklin et al. further discloses including polarizing glasses (23) for receiving different polarization wherein the polarizing glasses have a different polarization for a left lens and a right lens (column 2, lines 35-41).

6. Claims 1-8, and 23-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Moseley et al., U.S. Patent No. 6,046,849.

Regarding claims 1 and 23, Moseley et al. discloses a polarizer stereoscopic display apparatus (figs. 10-11) comprising a liquid crystal display panel (1) for producing modulated light in accordance with signal data having a left-eye and right-eye image information (column 1, line 64-column 2, line 35); a polarizer (21) for passing a portion of the modulated light from the liquid crystal display, wherein a portion of modulated light has a predetermined polarization (see fig. 23, column 20, lines 27-42); and a patterned retarder layer (20) including a plurality of first area cells (22, fig. 23) for separating light polarization passed through the polarizer into a left-eye picture and a plurality of second area cells (24, fig. 23) for separating light polarization passed through the polarizer into a right-eye picture, wherein the plurality of first area cells and the plurality of second area cells are patterned in accordance with the predetermined pattern of said left-eye and right eye-modulated light (column 20, lines 27-42).

Regarding claims 2-7, and 24-29, Moseley et al. further discloses wherein the retarder layer is formed on a transparent substrate (fig. 17, 60) that is made from a solvent-proof polymer

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(polyimide) and does not affect polarization changes of the light between the polarizer and the retarder layer and wherein the retarder layer contains a chiral material made from a liquid crystal polymer mixture containing a chiral dopant for enabling light modulation (column 18, lines 1-7) and is exposed to light so as to be patterned with a plurality of first area cells for transmitting light for the left-eye picture and a plurality of second area cells for transmitting light for the right-eye picture wherein the first and second cell areas are in alternating lines (figs. 17a-17d) or a checkered pattern (figs. 18a-18j).

Regarding claim 8, Moseley et al. further discloses including polarizing glasses (fig. 26) for receiving different polarization.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-7, 13-16, 19-22, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franklin et al. in view of Moseley et al.

Franklin et al. discloses the claimed invention except for the retarder layer containing a chiral material made from a liquid crystal polymer mixture containing a chiral dopant and being exposed to light so as to be patterned with a plurality of first area cells for transmitting light for the left-eye picture and a plurality of second area cells for transmitting light for the right-eye picture wherein the first and second cell areas are in alternating lines or in a checkered pattern.

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Moseley et al. teaches the retarder layer containing a chiral material and the first and second cells aligned in a checkered pattern (see #5 102 rejection above). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the retarder layer of Franklin et al. include a chiral material made from a liquid crystal polymer mixture containing a chiral dopant and being exposed to light so as to be patterned with a plurality of first area cells for transmitting light for the left-eye picture and a plurality of second area cells for transmitting light for the right-eye picture wherein the first and second cell areas are in alternating lines or in a checkered pattern to provide a guiding twisted retarder (column 18, lines 4-6, Moseley). The method of utilizing the structure of the claim is inherent therein.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (703) 305-5414. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on (703) 308-1687. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4900.


LAF

February 5, 2003


MARK A. ROBINSON
PRIMARY EXAMINER